Table S1. List of companies utilizing AI/ML as a platform to tackle COVID-19

Company Name	Company Description	Study description	References
Repurposing existing drugs			
BenevolentAI	UK	The UK based company has been utilizing AI for drug repurposing against SARS-CoV-2. They identified Baricitinib, a rheumatoid arthritis drug as a promising drug for COVID-19. Together with Eli Lilly started clinical trials in US.	https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30304-4/fulltext https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(20)30132-8/fulltext
Atomwise	USA	Atomwise's Artificial Intelligence Molecular Screen (AIMS) program helps scientists to speed-up their drug discovery research. Atomwise through their patented AI technology, AtomNet, predict the binding of billions of small molecules to a target protein.	https://www.atomwise.com/2020/05/21/atomwise-partners-with-global-research-teams-to-pursue-broad-spectrum-treatments-against-covid-19-and-future-coronavirus-outbreaks/
Innoplexus	Indo-German	The company is assessing the potential of drugs like Hydroxychloroquine and Remdesivir against SARS-CoV-2 by using patient's data through the AI platform. Their AI platform suggested better efficacy for drug combination like chloroquine and tocilizumab, chloroquine and remdesivir, and hydroxychloroquine with clarithromycin. They are also creating novel candidate drugs using their AI platform.	https://www.innoplexus.com/news/innoplexus-announces-major-findings-in-potential-combination-therapies-for-covid-19/
IQVIA	USA	Provide DeepPurpose, a deep learning toolkit for simple and efficient drug repurposing.	https://arxiv.org/pdf/2004.08919.pdf
Deargen	Republic of Korea	The company in collaboration with Dankook University, predicted the activity of several antiviral compounds against SARS-CoV-2 and identified atazanavir (anti-HIV drug) as a promising drug.	https://www.biorxiv.org/content/10.1101/2020.01.31.929547v1
Gero	Singapore	The company identified 9 promising drugs using its AI platform including	https://gero.ai/covid-19

		niclosamide and nitazoxanide, broad spectrum anti-parasitic and anti-viral drugs.	
Cyclica	Canada	The company has plan to screen over 6000 small molecules that are FDA approved or at-least in Phase I human trials, using their AI-based drug repurposing platform MatchMaker. The company has collaborated with China's Institute of Materia Medica for the in vitro and in vivo evaluation.	https://cyclicarx.com/news/chinas-institute-of-materia-medica-partners-with-cyclica-on-innovative-drug-repurposing-for-covid-19
Relation Therapeutics	UK	Relation therapeutics (London, UK) in collaboration with Mila (Qubec, AI) has announced 'Project RE' for the identification of repurposed drugs which especially tackle the viral entry and replication in COVID-19. Relation therapeutics will be using Graph machine learning in their drug development programme. 'Project RE' has been granted for $ 1.3 M funding from the Bill and Melinda Gates foundation.	http://www.drugdiscoverytoday.com/view/47797/relation-therapeutics-teams-up-with-mila-in-coalition-to-identify-covid-19-therapeutic-candidates/
Mannin - Cyclica Joint Venture	Mannin-Germany, *Cyclica-Canada*	The joint venture will focus on the development of novel compounds for the treatment of COVID-19. The collaboration built on Mannin's experience and research into targeting the tyrosine kinase receptor, combined with Cyclica's AI-augmented ligand design and ligand express drug discovery platforms.	https://cyclicarx.com/news/mannin-and-cyclica-enter-jv-to-rapidly-develop-covid-19-drugs
Healx:	UK	The company will be using its AI platform to uncover bi-and tri-combinations of approved drugs against the virus.	https://healx.io/healx-using-ai-to-find-combination-drug-treatments-for-covid-19/
PrecisionLife	UK	The company have identified 59 drug candidates suitable for repurposing into new therapies for patients who develop sepsis while suffering from severe COVID-19, using their AI-based precision medicine platform.	https://www.medrxiv.org/content/10.1101/2020.05.05.20091918v1.full.pdf
VantAI:	New York, USA	The company through its systems biology approach trying to understand the relationship of virus-human interactome over the course of infection. The company is currently screening around 300 compounds with a CRO to examine their effect on viral infection.	https://www.vant.ai/

Syntekabio	Republic of Korea	The company's AI and NGS based drug development platform DeepMatcher will be used to screen 3,000 approved drugs and identify potential COVID-19 therapeutics.	http://www.syntekabio.com/eng/index.html
BERG	USA	A clinical-stage AI-based biotech company in collaboration with Summit supercomputer at the Department of Energy's Oak Ridge National Laboratory will be involved in rapid drug discovery research in the fight against COVID-19.	https://www.hpcwire.com/off-the-wire/berg-creates-new-drug-research-effort-to-use-ornls-summit-supercomputer-against-covid-19/
AI VIVO	London	AI VIVO, a company using systems pharmacology and AI, has recently announced the drug dexamethasone as having high potential for the treatment of COVID-19. The company's 41 candidate drugs are now in clinical trials for COVID-19.	https://www.recoverytrial.net/news/low-cost-dexamethasone-reduces-death-by-up-to-one-third-in-hospitalised-patients-with-severe-respiratory-complications-of-covid-19
Designing new drugs			
Insilico medicine:	China	On January 28th, 2020 Insilico Medicine decided to utilize its AI-based generative chemistry pipeline to design novel inhibitors of SARS-CoV-2 and started the generation on January 30th. This Hong-Kong based company ran operations and published over 100 promising drugs.	https://insilico.com/ncov-sprint https://chemrxiv.org/articles/Potential_2019-nCoV_3C-like_Protease_Inhibitors_Designed_Using_Generative_Deep_Learning_Approaches/11829102
Nanome, Inc	USA	A virtual reality (VR) start-up using computational chemistry software platform, in collaboration with Insilico Medicine has identified 10 potential small molecule inhibitors targeting the SARS-CoV-2 main protease.	https://insilico.com/insiliconanome
Exscientia:	UK	The UK based company partnered with the Diamond Light Source, UK's synchrotron facility, to screen about 15,000 clinically ready molecules from Scripps Research Institute in California, US.	https://www.exscientia.ai/news-insights/exscientia-announces-joint-initiative-to-identify-covid-19
Southwest Research Institute (SwRI)	USA	Recently, SwRI with its Rhodium™ virtual screening tool investigated more than 40 million drug compounds in a week, with the help from Department of Defense supercomputers, to identify drugs	https://www.swri.org/press-release/dod-contract-covid-19-treatment-rhodium-

		against the coronavirus. SwRI recently received a 1.9 million USD, one-year contract to support efforts to develop a COVID-19 treatment from the Henry M. Jackson Foundation for the Advancement of Military Medicine.	virtually-screen-drug-compounds
Iktos	France	Iktos plans to design novel molecules and has partnered with US-based SRI Biosciences to utilize their fully automated end-to-end synthetic chemistry system to synthesize and test the molecules.	https://www.sri.com/iktos-and-sri-international-announce-collaboration-to-combine-artificial-intelligence-and-novel-automated-discovery-platform-for-accelerated-development-of-new-anti-viral-therapies/press-release/
Datasets			
Vectorspace AI	USA	Vectorspace AI (VXV), a Natural Language Processing and Understanding (NLP/NLU) company, in collaboration with Amazon and Microsoft in connection with the United States Office of Science and Technology Policy (OSTP), created a real-time COVID-19 drug repurposing datasets.	https://vectorspace.ai/api-covid-19.html
The Institute of Cancer Research,	London	Coronavirus-CanSAR uses AI to build complex three-dimensional maps to show virus interaction with human. These maps are based on data of over 1 million interactions, and will highlight those interactions that could potentially be targeted with new drugs. This online knowledgebase updated weekly and contains all the 3D structure published in the PDB, totalling over 450,000 so far. This information includes more than 830 3D-structure snapshots of 47 proteins made by the SARS-CoV-2, MERS and SARS. This new 'knowledgebase' contains the data published across the world on viral proteins; interactions of viral proteins with human proteins; drugs and drug mechanisms, and clinical trials. Using canSAR's AI technology, the ICR team analysed more than four million sites	https://corona.cansar.icr.ac.uk/

		across all proteins in its database, including more than 8,000 from coronavirus protein structures.	
PostEra	USA	In collaboration with Diamond light source, in UK the PostEra team launched the COVID__Moonshot to crowdsource drug designs from medicinal chemists. Then PostEra applied their AI-based technology to determine if and how those designs could be made.	https://postera.ai/covid